FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

EMCO Chemical Distributors, Inc.

Attn: Edward Polen
2100 Commonwealth Avenue

North Chicago, Illinois 60064

<u>Application No.</u>: 76100054 <u>I.D. No.</u>: 097125ABI

Applicant's Designation: Date Received: July 11, 2002

Subject: Chemical Packaging Plant

Date Issued: November 25, 2002 Expiration Date: November 25, 2007

Location: 2100 Commonwealth Avenue, North Chicago

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of tank farm (82 storage tanks), direct filling operation, 20 blending tanks and container filling operations, truck filling operation, truck cleaning operation, wastewater treatment plant, boilers/space heaters and inorganic chemicals filling operations controlled by acid/caustic scrubber pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emission of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic materials (VOM), 10 tons/year of a single hazardous air pollutants (HAP) and 25 tons/year for total HAPs), as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Program (CAAPP) permit.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. Emissions of organic material into the atmosphere shall not exceed 3.6 kg/hr (8 lbs/hr) during the loading of any organic material from the aggregate loading pipes of any loading area having throughput of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading area is equipped with submerged loading pipes or an equivalent device (35 Ill. Adm. Code 218.122(a)).
- b. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 1 (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device (35 Ill. Adm. Code 218.122(b)).

- c. If no odor nuisance exists the limitations of Conditions 2(a) and (b) shall only apply to the loading of VOL with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70° F) (35 Ill. Adm. Code 218.122(c)).
- 3. Total plant operations and VOM emissions from the organic chemicals processing operations shall not exceed 18.0 Tons/Yr as specified below:
 - a. Organic liquids storage tanks operations:

Chemical Throughput		VOM Emissions		
(10^3 Gal/Mo)	<u>(10³ Gal/Yr)</u>	(Tons/Mo)	(Tons/Yr)	
3,300	19,800	0.8	4.5	

b. Direct filling operations:

Chemical Throughput		VOM Emissions		
(10^3 Gal/Mo)	<u>(10³ Gal/Yr)</u>	(Tons/Mo)	(Tons/Yr)	
1,200	7,200	0.7	4.0	

c. Blending tanks and container filling operations:

Chemical Throughput		VOM Emissions	
(10^3 Gal/Mo)	(10^3 Gal/Yr)	(Tons/Mo)	(Tons/Yr)
1,000	6 , 000	1.0	6.4

d. Tank truck loading operations:

Chemical Throughput		VOM Emissions	
(10^3 Gal/Mo)	(10^3 Gal/Yr)	(Tons/Mo)	(Tons/Yr)
840	5,000	0.5	3.1

VOM emissions shall be calculated using equations given by AP-42 (5th edition, Section 7.1) and utilized in the USEPA distributed computer program TANKS. Only working losses part of emission calculations shall be used for direct filling, blending and container filling operations and tank truck loading. Emissions for blending and container filling shall be doubled to account for double liquid transfer. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 4. This permit is issued based on negligible emission of volatile organic materials from truck cleaning operations and wastewater treatment plant. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hr and 0.44 ton/year.
- 5. Operation and emissions of the three boilers (combined) shall not exceed the following limits:

Natural Gas Usage: 12 mmscf/mo, 72 mmscf/yr

	Emission Factor	Emissions	
<u>Pollutant</u>	(Lb/mmscf)	(Tons/Mo)	(Tons/Yr)
2-11 (2-2)	100	0 6	2 6
Nitrogen Oxides (NO_x)	100	0.6	3.6
Carbon Monoxide (CO)	84	0.5	3.0
Particulate Matter (PM)	7.6	0.05	0.3
Volatile Organic Materials (VOM)	5.5	0.03	0.2

These limits are based on maximum gas consumption and standard emission factor given by AP-42. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 6. This permit is issued based on negligible emission of particulate matter from inorganic chemicals filling operations. For this purpose emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- 7. The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by rule which would require the Permittee to obtain a Clean Air Act Permit Program permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- 8. The Permittee shall maintain monthly records of the following items:
 - a. Names and throughput of all materials of tank farm (gallons/month and gallons/year);
 - b. Names and throughput of all materials of direct filling operations (gallons/month and gallons/year);
 - c. Names and throughput of all materials of blending and container filling operations (gallons/month and gallons/year);
 - d. Names and throughput of all materials of truck filling operations (gallons/month and gallons/year);
 - e. Gas consumption (mmscf/month and mmscf/year); and
 - f. VOM and HAP emissions calculation for each operation (tons/month and tons/year).
- 9. The Permittee shall keep records showing the dimension of the storage tanks and an analysis showing the capacity of the storage tanks (35 Ill. Adm. Code 218.129(f)).

- 10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Agency request for records during the course of a source inspection.
- 11. If there is an exceedance of the requirements of this permit as determined by the record required by this permit, the Permittee shall submit a report to the Agency's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 12. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 13. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year: names and identification number of materials transferred and their throughput (Gal/Yr). If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.
- 14. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

<u>and</u> one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control - Regional Office 9511 West Harrison Des Plaines, Illinois 60016

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If you have any questions on this permit, please call Valeriy Brodsky at (217)782-2113.

Donald E. Sutton, P.E. Manager of Permit Section Division of Air Pollution Control

DES:VJB:psj

cc: Illinois EPA, FOS Region 1

Illinois EPA, Compliance Section

Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the chemical packaging plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a throughput of 19.8 million gallons of liquid organic chemicals per year. The resulting maximum emissions are well below the levels, e.g., 25 tons/year for VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP, at which this source would be considered a major source for purposes Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

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